SPECIFICATION FOR MULTI PURPOSE CRANE
MAIN CYLINDER, NONMAGNETIC, 3,000 PSI OPERATING
PRESSURE WITH OVERCENTER VALVES

1.0 ITEM 0001

1.0.1 Stroke: 49-1/2 +/- 1/16 Inches
Rod Diameter: 3.5 Inches
Bore/Piston Nominal: 5.5 Inches
Seals Static: O-Ring

Seals Dynamic:
1) Bronze Impregnated Cap Seal
2) Parker Polymite Piston Seal Assembly

Cushion:
1) Cap End Cushion/Brake Assembly
2) Rod End Cushion/Brake Assembly

Materials:
1) External Components - Stainless Steel 304 Or 316.
Bushings-Maintenance Free Bronze.
2) Internal - Nonmagnetic Except Overcenter Valve Internal
Components May Be Steel
Cap/Rod End Clevis Pin Center To Center-Retracted: 77.75 +/-1/16 Inches
Cap/Rod End Clevis Bore Diameter: 2.756 Inches
Maximum Cap/Rod End Clevis Radius: 3.25 Inches
Maximum Cap/Rod End Clevis Width: 2.165 Inches
Maximum Cylinder Outer Diameter: 10" +1/16 Inches
Rod Coating: Thermal Coating Suitable For Marine Environment.
0.010" Chrome Plating or HVOF Tungsten Carbide Hastelloy C-276 Metco 5803 Product
Exterior Coating: Epoxy Coating Followed By Haze Gray Paint
Suitable For Marine Environment.
No Exterior Coating On Exposed Rod.

Overcenter Valve Mounting: One Each At Cap End And Rod End On
Underside Of Cylinder Using Flange Type O-Ring Seal Fittings

Overcenter Valve Function: Free Flow Into Cylinder. Pilot (With Dampening) Opens Valve.

Minimum Ratio 3:1. Relief Portion Set To Relieve Cap End Pressure At 2,030+/- 50 Psi And Rod End At 2,030+/- 50 Psi.

Piping/Tubing: Stainless Steel, 3,000 Psi Working Pressure.

Fittings: O-Ring Seal. SAE 37 Degree Flare Is Acceptable.
Piping Interface: Must mate to two SAE 37 degree –12 fitting at cap end overcenter valve.

Label Plate: One CRES Label Plate (Minimum) Must Be Connected To Each Overcenter Valve And Cylinder Assembly Containing Manufacturer Name And Assembly Part Number.

1.0.2 Hydrostatic Test:

a) Test to 1.5 times system pressure (3,000 psi) at 4,500 psi.
b) No leakage or permanent deformation allowed.
c) Hold for 10 minutes
d) Cycle the cylinder after depressuring system.

1.0.3 Piping Hydrostatic Test:

a) Test to 1.35 times system pressure (4,050 psi) at 4,500 psi.
b) Hold for 10 minutes
c) Cycle the cylinder after depressuring system.

Note: System fluid is MIL-PRF-19457 Symbol 2075

ITEM 0002

Same as Item 0001

SPECIFICATION FOR MULTI PURPOSE CRANE
MAIN JIB CYLINDER, NONMAGNETIC, 3,000 PSI OPERATING
PRESSURE WITH OVERCENTER VALVES

2.0 ITEM 0003

2.0.1 Stroke: 42-1/2 +/- 1/16 Inches
Rod Diameter: 3.5 Inches
Bore/Piston Nominal: 6 Inches
Seals Static: O-Ring

Seals Dynamic:
1) Bronze Impregnated Cap Seal
2) Parker Polymite Piston Seal Assembly

Cushion:
1) Cap End Cushion/Brake Assembly
2) Rod End Cushion/Brake Assembly

Materials:
1) External Components - Stainless Steel 304 Or 316.
Bushings-Maintenance Free Bronze.
2) Internal - Nonmagnetic Except Overcenter Valve Internal
Components May Be Steel
Cap/Rod End Clevis Pin Center To Center-Retracted: 70 +/-1/16 inches
Cap/Rod End Clevis Bore Diameter: 2.756 Inches
Maximum Cap/Rod End Clevis Radius: 3.25 Inches
Maximum Cap/Rod End Clevis Width: 2.165 Inches
Maximum Cylinder Outer Diameter: 10.25 +1/16 Inches
Rod Coating: Thermal Coating Suitable For Marine Environment.
0.010" Chrome Plating or HVOF Tungsten Carbide Hastelloy C-276 Metco 5803 Product
Exterior Coating: Epoxy Coating Followed By Haze Gray Paint
Suitable For Marine Environment.
No Exterior Coating On Exposed Rod.

Overcenter Valve Mounting: One Each At Cap End And Rod End On
Underside Of Cylinder Using Flange Type O-Ring Seal Fittings

Overcenter Valve Function: Free Flow Into Cylinder. Pilot (With Dampening) Opens Valve.

Minimum Ratio 3:1. Relief Portion Set To Relieve Cap End Pressure At 2,030+/- 50 Psi And Rod End At 2,030+/- 50 Psi.

Piping/Tubing: Stainless Steel, 3,000 Psi Working Pressure.

Fittings: O-Ring Seal. SAE 37 Degree Flare Is Acceptable.
Piping Interface: Must mate to two SAE 37 degree –12 fitting at cap end overcenter valve.

Label Plate: One CRES Label Plate (Minimum) Must Be Connected To Each Overcenter Valve And Cylinder Assembly Containing Manufacturer Name And Assembly Part Number.

2.0.2 Hydrostatic Test:

a) Test to 1.5 times system pressure (3,000 psi) at 4,500 psi.
b) No leakage or permanent deformation allowed.
c) Hold for 10 minutes
d) Cycle the cylinder after depressuring system.

2.0.3 Piping Hydrostatic Test:

a) Test to 1.35 times system pressure (4,050 psi) at 4,500 psi.
b) Hold for 10 minutes
c) Cycle the cylinder after depressuring system.

Note: System fluid is MIL-PRF-19457 Symbol 2075

ITEM 000 4

Same as ITEM 000 3

CONTRACT DATA REQUIREMENTS LIST

(2 DATA ITEM'S)

Form Approved
OMB 0704-0188

A.Contract Line Item No.	B. Exhibit	C. Category
0001, 0002 , 0003, 0004	A	TDP _____ TM _____ OTHER _____

D.System/Item	E. Contract / PR No.	F. Contractor
CYLINDERS		

Block 1

1. Data Item No.	2. Title of Data Item	3. Subtitle	17. Price Group
A001	INSPECTION & ACCEPTANCE		18.Estimated Total Price

4. Authority (Data Acquisition Document No.)	5. Contract Reference	6. Requiring Office
See Block 16	DESCRIPTION / SPECIFICATION	NSWCCD-SSES

7. DD 250 Req.	9. Dist Statement Required	10.Frequency	12. Date Of First Submission
SD		ONE / R	
8.App.Code		**11.As Date**	**13.Date Of Subsequent Submission**
		30 DAC	

16.Remarks

BLOCK 4 : THE SYSTEM SHALL BE IN STANDARD COMMERCIAL FORMAT.

14. Distribution

a. Addressee	b. Copies		
	Draft	Final Reg.	Final Repro.
NSWCCD-SSES 9731		1	0
15. Total		1	0

Block 2

1. Data Item No.	2.Title Of Data Item	3. Subtitle	17. Price Group
A002	INSPECTION RECORDS		18.Estimated Total Price

4. Authority (Data Acquisition Document No.)	5. Contract Reference	6. Requiring Office
See Block 16	DESCRIPTION / SPECIFICATION	NSWCCD-SSES

7. DD 250 Req.	9. Dist Statement Required	10.Frequency	12. Date Of First Submission
SD		ONE / R	
8.App.Code		**11.As Date**	**13.Date Of Subsequent Submission**
		SEE BLOCK 16	

16.Remarks

BLOCK 4 : THE CONTRACTOR SHALL PROVIDE RECORDS CITED IN THE DESCRIPTION / SPECIFICATION SECTION OF THE CONTRACT, PARAGRAPH 1.0.2., 1.0.3, 2.0.2, 2.0.3

14. Distribution

a. Addressee	b. Copies		
	Draft	Final Reg.	Final Repro.
NSWCCD-SSES 9731		1	0
15. Total		1	0

G. Prepared	H. Date	I. Approved	Date
LOUIS J. DISTEFANO	20 AUG 2003		20 AUG 2003

SOURCE SELECTION CRITERIA

LOW COST/ TECHNICALLY ACCEPTABLE EVALUATION

a) The contract resulting from this solicitation will be awarded to that responsible offeror submitting a technically acceptable proposal with the lowest evaluated estimated price.

b) Technical acceptability will be determined in accordance with the following evaluation factors, based on information submitted in response to the provisions entitled "Technical Proposals". To be determined technically acceptable, the offeror must be technically acceptable in each of the areas identified by the following evaluation factors:

1) CORPORATE EXPERIENCE
2) CAPABILITIES
3) PAST PERFORMANCE

c) Technical Proposals:

Offerors shall provide technical proposals which enable the Government to make a thorough evaluation and arrive at a sound determination as to whether or not the proposal will meet the Government's stated requirements. To this end, each technical proposal shall be so specific, detailed and complete as to clearly and fully demonstrate that the prospective offeror has a thorough knowledge and understanding of the requirements and has the valid and practical solutions for technical problems. Statements which paraphrase the specifications or attest that "standard procedures will be employed", are inadequate to demonstrate how it is proposed to comply with the requirements of the specifications and this clause. As a minimum, the proposal must clearly provide the following:

1. Corporate Experience

A narrative shall be prepared describing the offeror's experience with machining and welding various submarine antenna / periscope components similar to those assemblies as contained in the drawings listed under Section C., herein, along with experience in SUBSAFE / Level I material traceability and maintaining a quality program meeting the requirements of MIL-I-45208A. The offeror shall provide a minimum of three (3) contracts within the past ten (10) years, citing this experience. The offeror shall provide in a matrix format, the contract number, type of contract, contract dollar value, period of performance, work description / scope of work, and the name of the customer.

2. Capability:

A narrative shall be prepared which demonstrates the offeror's capability to provide equipment and facilities to accomplish the required machining and welding tasks and provide qualified personnel meeting the requirements identified under Section C. In addition, the offeror shall demonstrate facilities and equipments which possess the following capabilities:

a. Capability in machining components of approximately 15 feet and greater in length and 3 feet in width.

b. Welder certification in accordance with MIL-STD-248.

c. Written and approved welding procedures in accordance with MIL-STD-278 for the type of services required. Approved non-destructive test procedures in accordance with MIL-STD-271, NAVSHIPS 0900-003-8000, and NAVSHIPS 0900-003-9000.

3. Past Performance

a. The offeror shall provide a list of the last two (2) contracts or subcontracts completed during the last three (3) years and all contracts and subcontracts currently in process. Contracts listed may include those entered into by the Government, agencies of state and local governments and commercial customers. Offerors shall include the following information for each contract and sub-contract:

1. Name of customer
2. Contract number
3. Contract Type
4. Total contract value
5. Description of work
6. Contracting Officer/ Administrator and telephone number
7. Program Manager and telephone number

b. Each offeror will be evaluated on their performance under existing and prior contracts for similar products or services. Performance information will be used for both responsibility determinations and as an evaluation factor.

(c) Exceptions:

Offerors are not encouraged to take exceptions to this solicitation, however any exceptions taken to the specifications or terms and conditions of this solicitation shall be explained in detail and set forth in a cover letter. Offerors shall identify the particular section, clause paragraph and page to which they are taking exception.

INSPECTION AND ACCEPTANCE

1. Contractor is required to perform all inspections to ensure the quality of finished item and for inspection and test equipment necessary to ensure that results of inspections or tests are accurate.

2. Due to the critical nature of this material , a Representative of NSWCCD- SSES, SSD, Code 9731, is available to furnish Technical Assistance on Quality Control Matters and shall have the option of conducting Quality Assurance Surveillance. A minimum of seven (7) working days is required to arrange such a visit for any required inspections.

3. Unless otherwise specified, the supplier is responsible for the performance of all inspection requirements as specified herein. The Government reserves the right to perform any of the inspections/tests set forth in the above requirements where such inspection /test are deemed necessary to ensure the supplies and services conform to the requirements.

4. This contract shall not be considered complete unless all documents and products required to be delivered under this contract are received and accepted by NSWCCD-SSES.